

## CLAIMS

### What is Claimed is:

1. A controller comprising:
  - a rotatable platter journaled for rotation, said rotatable platter having at least one degree of freedom of movement in addition to rotation;
  - an optical system responsive to said rotatable platter; and
  - said optical system including an output responsive to said rotatable platter.
2. The controller of Claim 1 wherein said rotatable platter includes a textured pattern whereby said optical system acquires sequential surface images of said textured pattern.
3. The controller of Claim 2 wherein said optical system is responsive to rotational movement of said rotatable platter.
4. The controller of Claim 2 wherein said optical system is responsive to rotational velocity of said rotatable platter.
5. The controller of Claim 2 wherein said optical system is responsive to rotational position of said rotatable platter.

6. The controller of Claim 1 wherein said at least one degree of freedom of movement comprises one degree of freedom of movement.
7. The controller of Claim 6 wherein said one degree of freedom comprises tilting of said rotatable platter.
8. The controller of Claim 7 wherein said optical system is responsive to tilting movement of said rotatable platter.
9. The controller of Claim 7 wherein said optical system is responsive to tilting velocity of said rotatable platter.
10. The controller of Claim 7 wherein said optical system is responsive to tilting position of said rotatable platter.
11. The controller of Claim 1 wherein said at least one degree of freedom of movement comprises two degrees of freedom of movement.
12. The controller of Claim 11 wherein said two degrees of freedom comprise tilting of said rotatable platter in directions orthogonal to each other.

13. The controller of Claim 12 wherein said optical system is responsive to tilting movement of said rotatable platter.

14. The controller of Claim 12 wherein said optical system is responsive to tilting velocity of said rotatable platter.

15. The controller of Claim 12 wherein said optical system is responsive to tilting position of said rotatable platter.

16. The controller of Claim 1 wherein said rotatable platter includes a circumferential skirt with a textured pattern whereby said optical system acquires sequential surface images of said textured pattern.